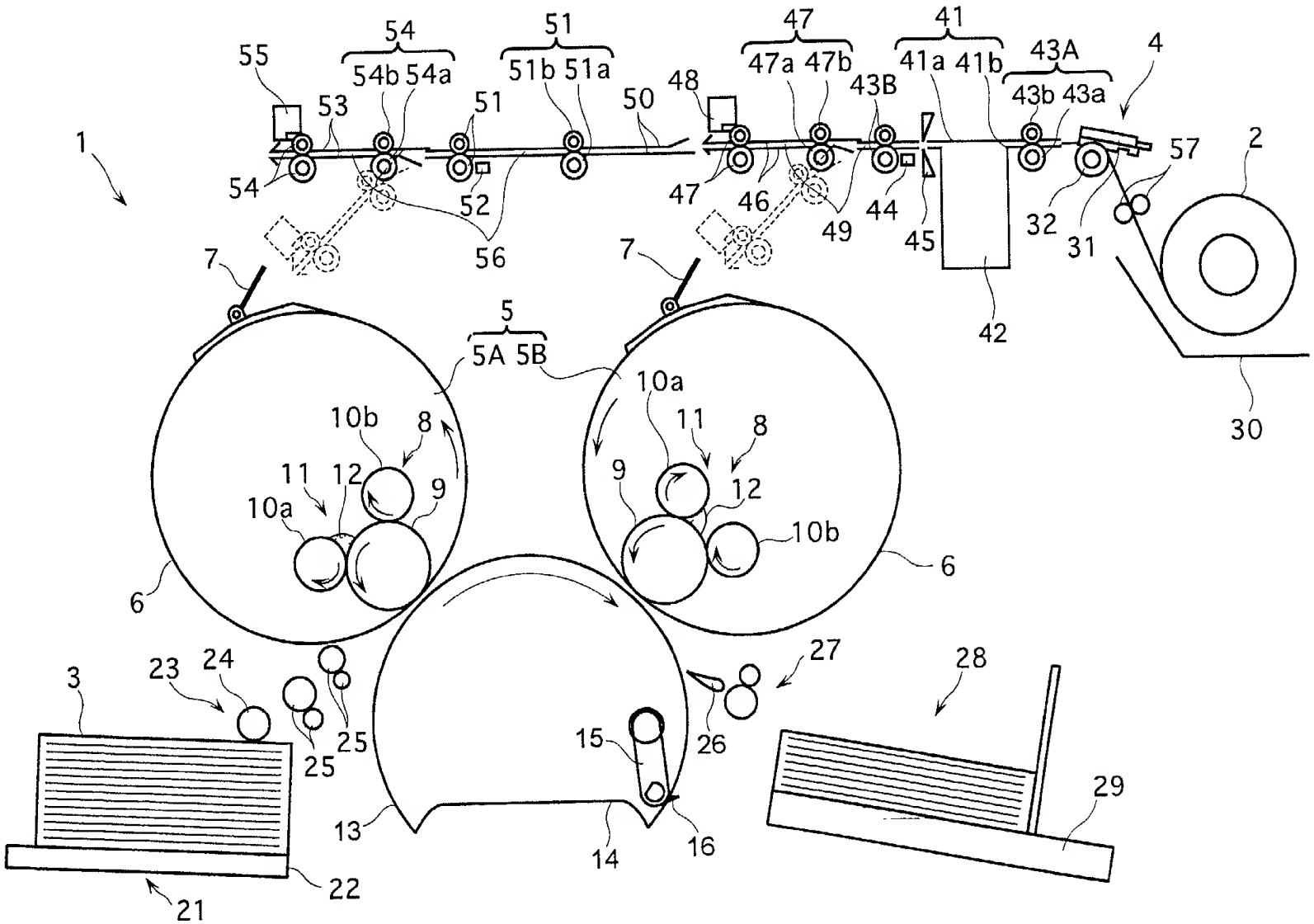
FIG.1



K-1962
1/1

FIG.2

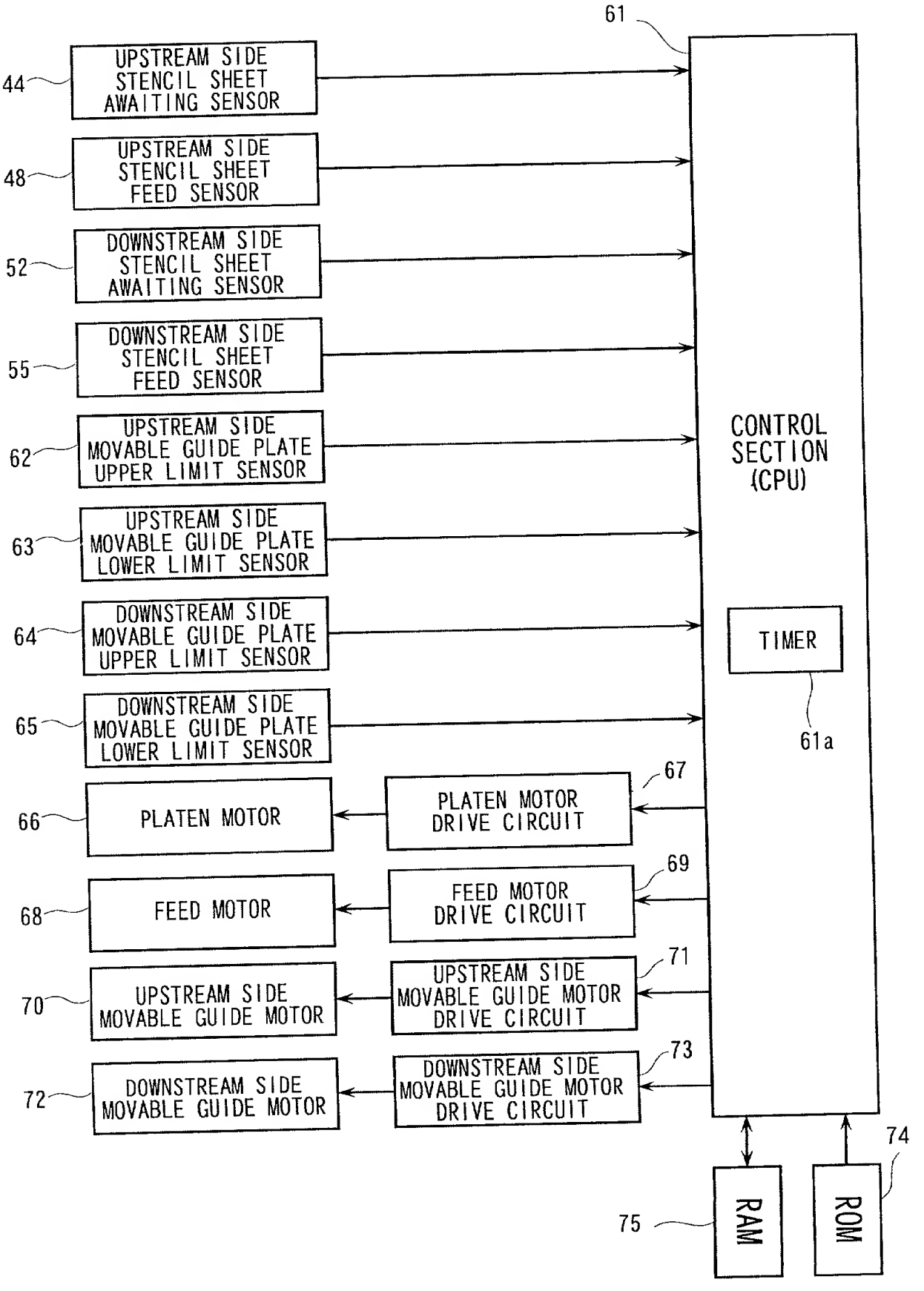

61
44
UPSTREAM SIDE STENCIL SHEET AWAITING SENSOR
48
UPSTREAM SIDE STENCIL SHEET FEED SENSOR
52
DOWNSTREAM SIDE STENCIL SHEET AWAITING SENSOR
55
DOWNSTREAM SIDE STENCIL SHEET FEED SENSOR
62
UPSTREAM SIDE MOVABLE GUIDE PLATE UPPER LIMIT SENSOR
63
UPSTREAM SIDE MOVABLE GUIDE PLATE LOWER LIMIT SENSOR
64
DOWNSTREAM SIDE MOVABLE GUIDE PLATE UPPER LIMIT SENSOR
65
DOWNSTREAM SIDE MOVABLE GUIDE PLATE LOWER LIMIT SENSOR
66
PLATEN MOTOR
67
PLATEN MOTOR DRIVE CIRCUIT
68
FEED MOTOR
69
FEED MOTOR DRIVE CIRCUIT
70
UPSTREAM SIDE MOVABLE GUIDE MOTOR
71
UPSTREAM SIDE MOVABLE GUIDE MOTOR DRIVE CIRCUIT
72
DOWNSTREAM SIDE MOVABLE GUIDE MOTOR
73
DOWNSTREAM SIDE MOVABLE GUIDE MOTOR DRIVE CIRCUIT
CONTROL SECTION (CPU)
TIMER
61a
74
75
RAM
ROM

FIG.3

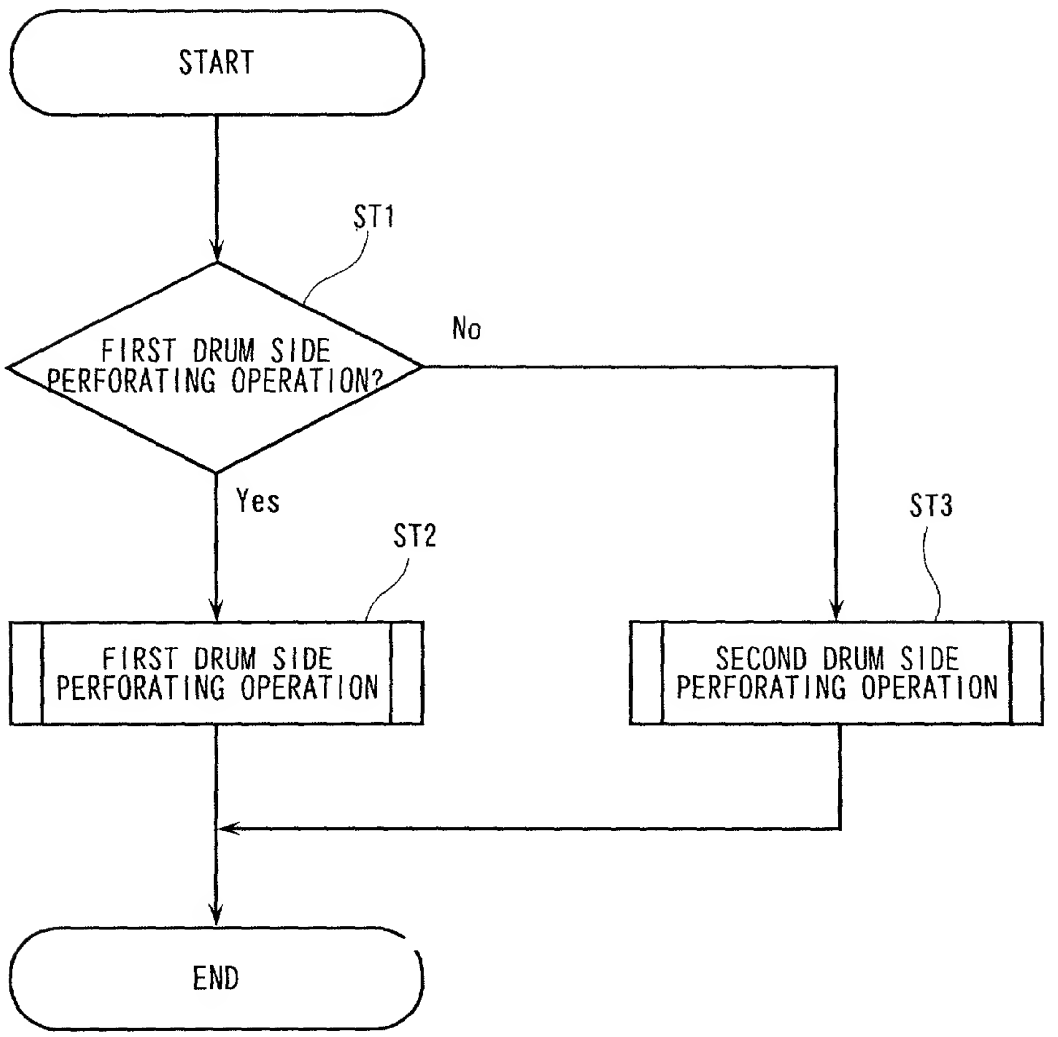

START
ST1
FIRST DRUM SIDE PERFORATING OPERATION?
No
Yes
ST2
ST3
FIRST DRUM SIDE PERFORATING OPERATION
SECOND DRUM SIDE PERFORATING OPERATION
END

FIG.4

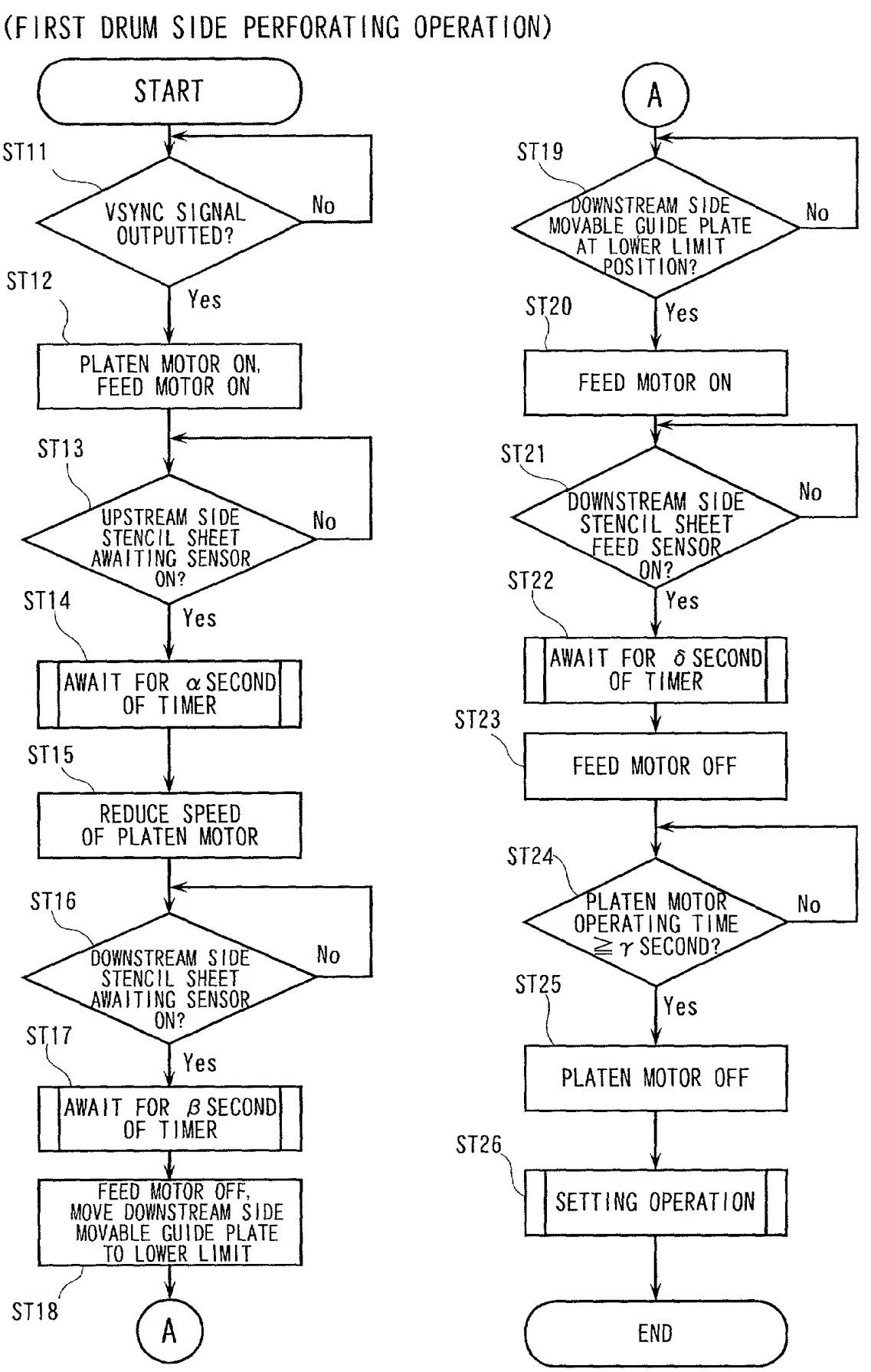

(FIRST DRUM SIDE PERFORATING OPERATION)
START
ST11
VSYNC SIGNAL OUTPUTTED?
No
Yes
ST12
PLATEN MOTOR ON, FEED MOTOR ON
ST13
UPSTREAM SIDE STENCIL SHEET AWAITING SENSOR ON?
No
Yes
ST14
AWAIT FOR α SECOND OF TIMER
ST15
REDUCE SPEED OF PLATEN MOTOR
ST16
DOWNSTREAM SIDE STENCIL SHEET AWAITING SENSOR ON?
No
Yes
ST17
AWAIT FOR β SECOND OF TIMER
FEED MOTOR OFF, MOVE DOWNSTREAM SIDE MOVABLE GUIDE PLATE TO LOWER LIMIT
ST18
A
A
ST19
DOWNSTREAM SIDE MOVABLE GUIDE PLATE AT LOWER LIMIT POSITION?
No
Yes
ST20
FEED MOTOR ON
ST21
DOWNSTREAM SIDE STENCIL SHEET FEED SENSOR ON?
No
Yes
ST22
AWAIT FOR δ SECOND OF TIMER
ST23
FEED MOTOR OFF
ST24
PLATEN MOTOR OPERATING TIME ≧ γ SECOND?
No
Yes
ST25
PLATEN MOTOR OFF
ST26
SETTING OPERATION
END

FIG.5

(SECOND DRUM SIDE PERFORATING OPERATION)

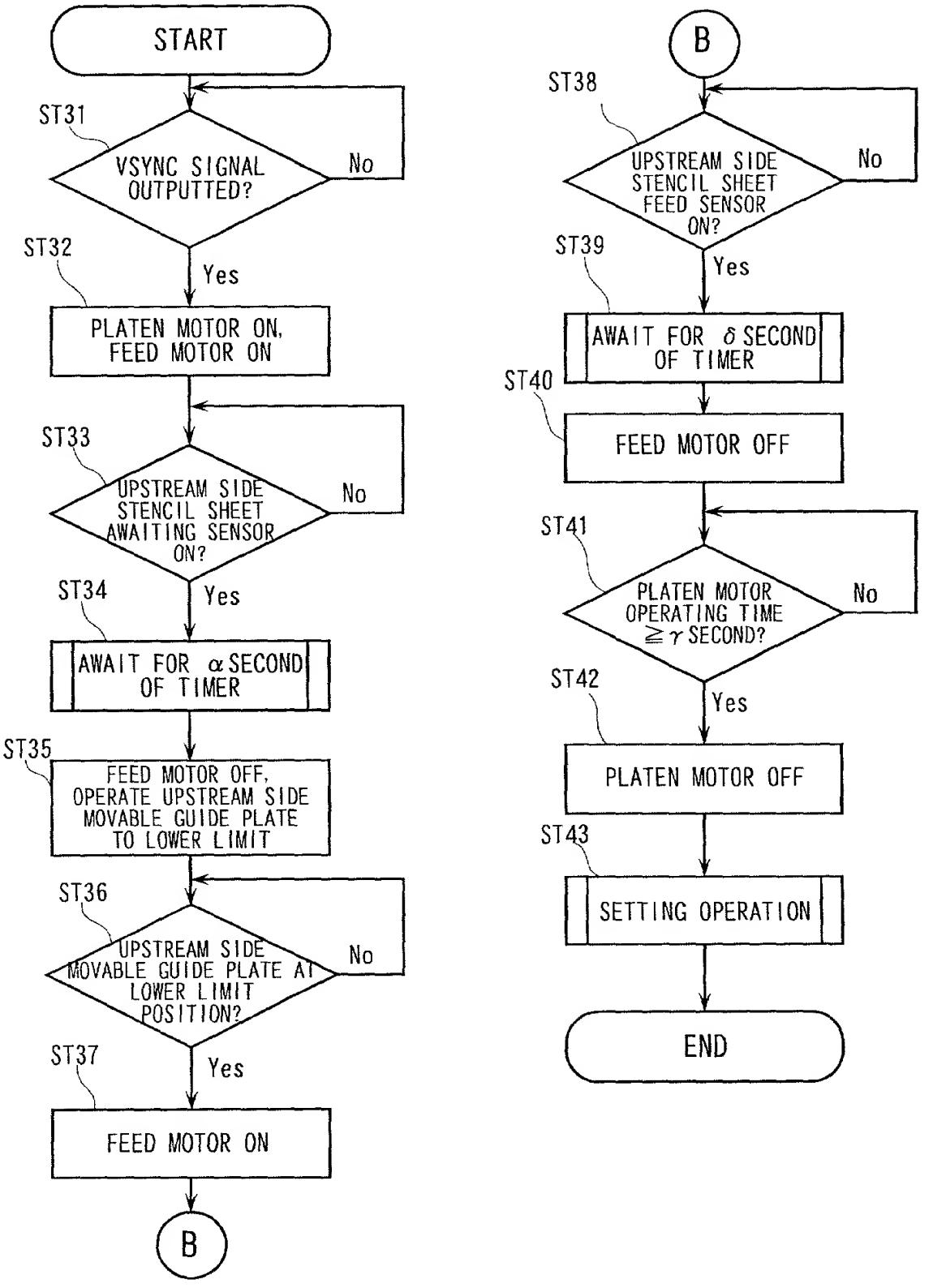
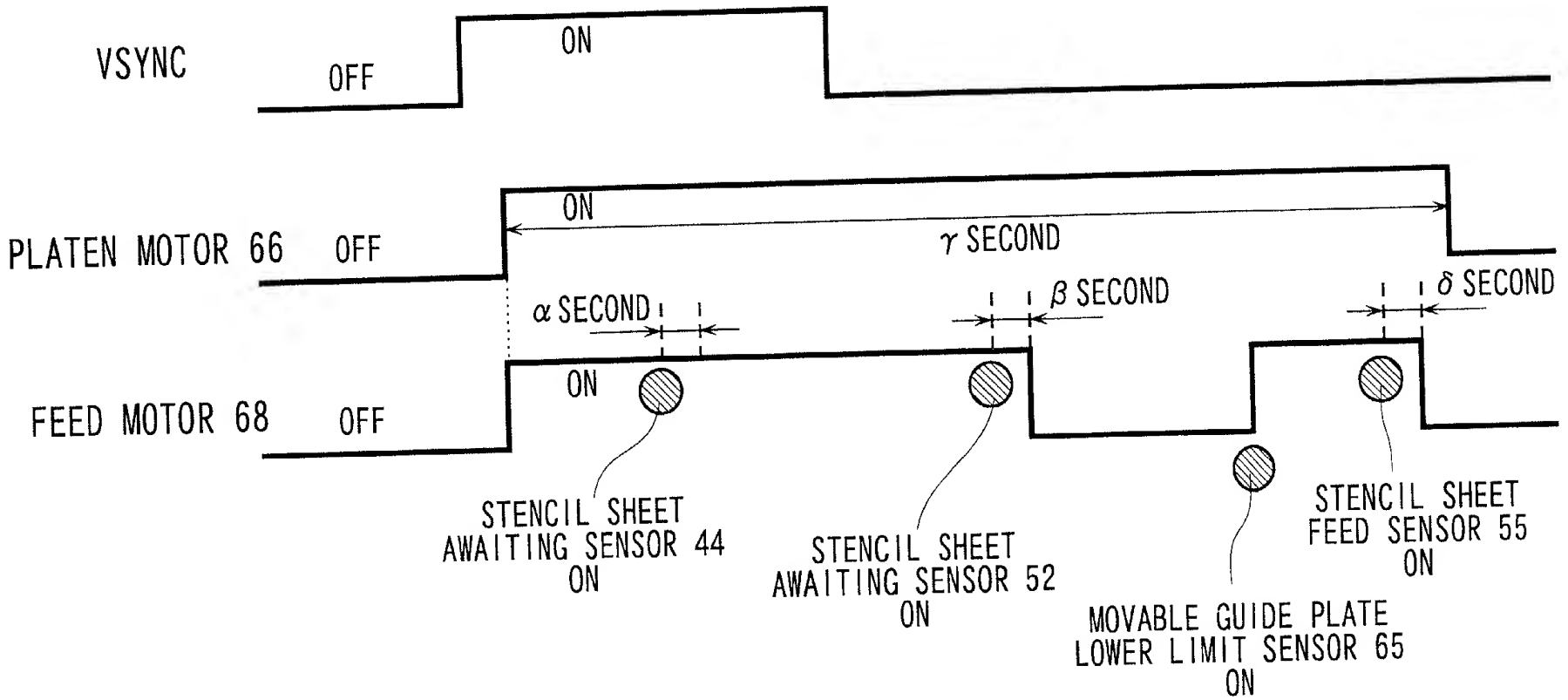
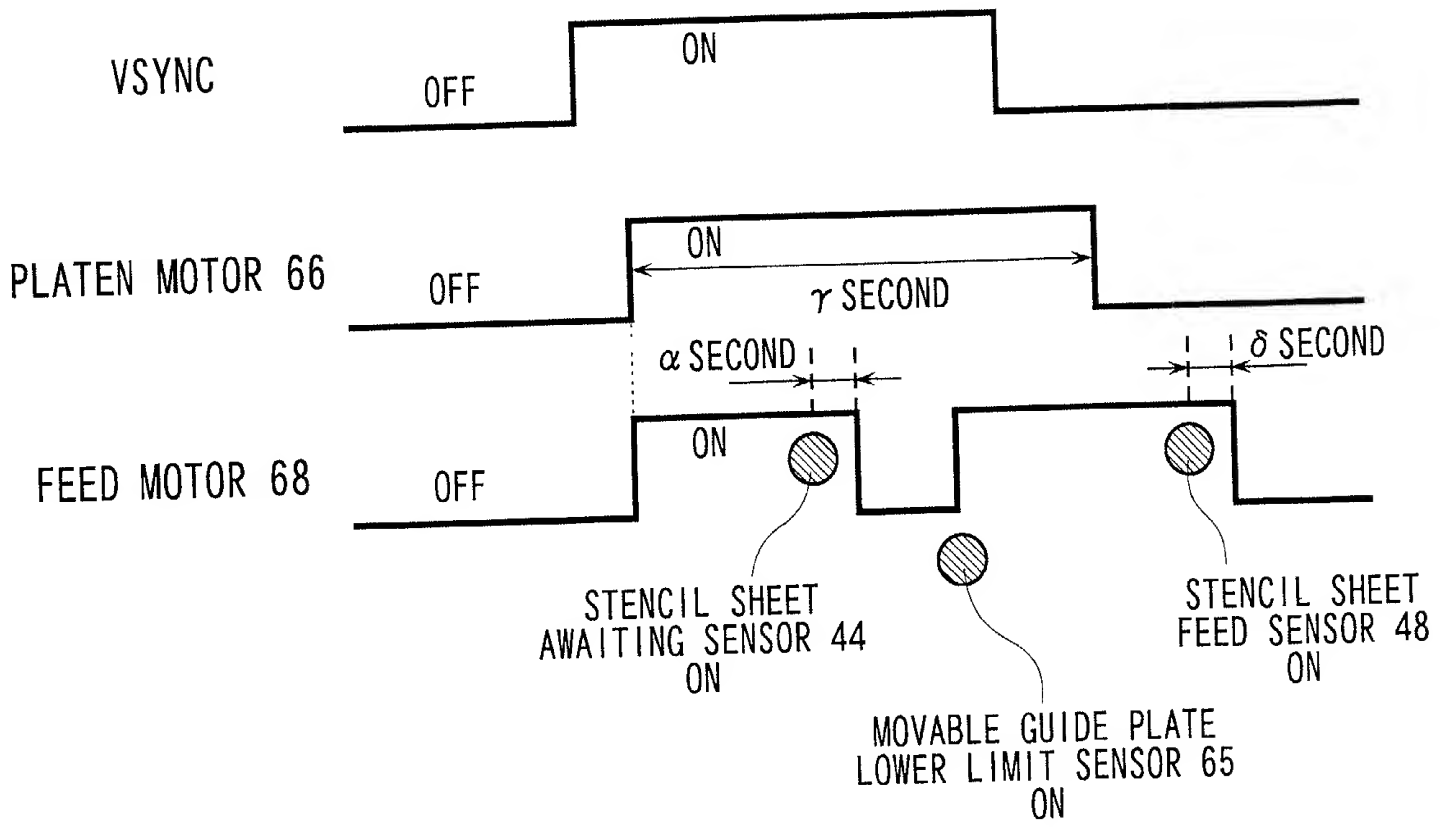


FIG.6A



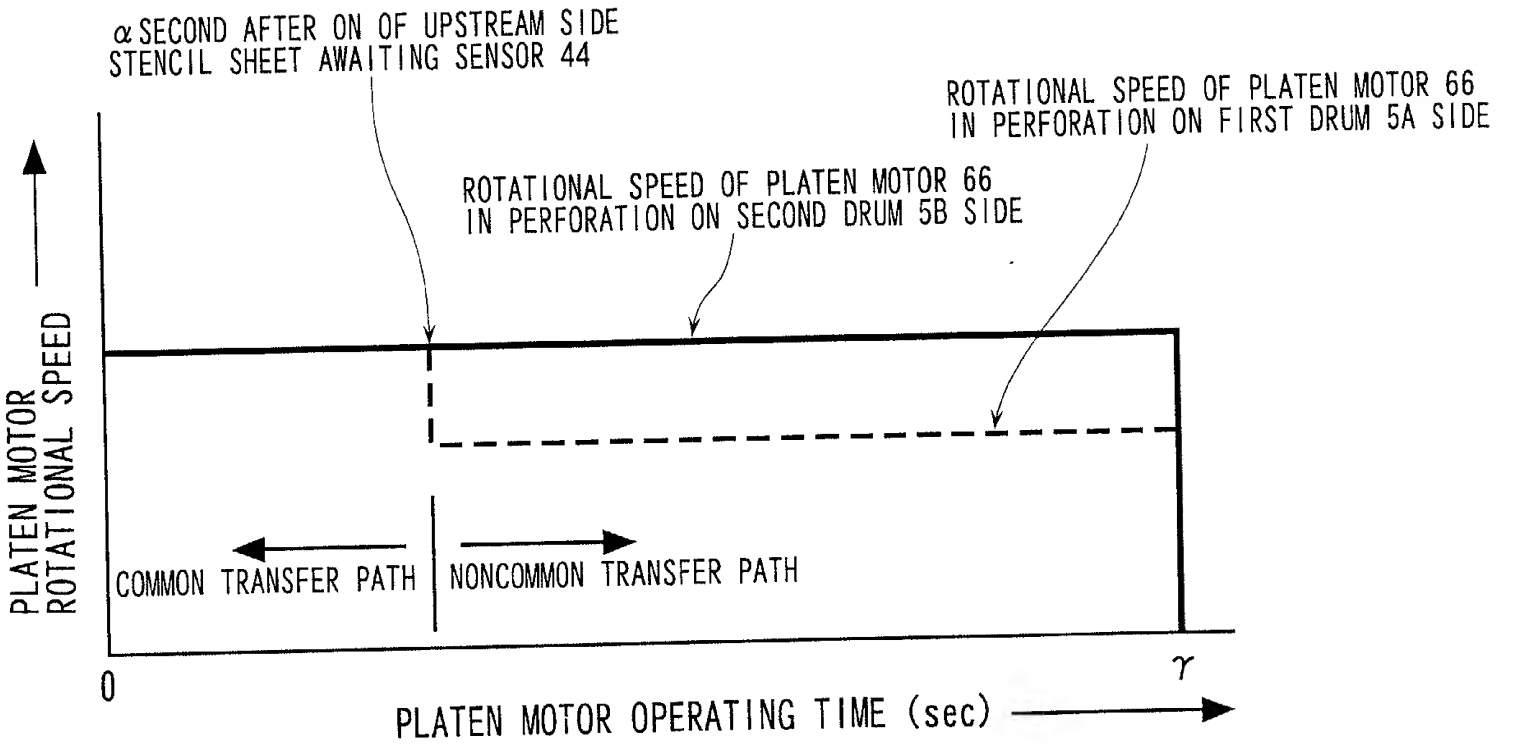
R-1962
6/11

FIG.6B



K-1962
2/11

FIG.7



K-1962
8/11

FIG.8

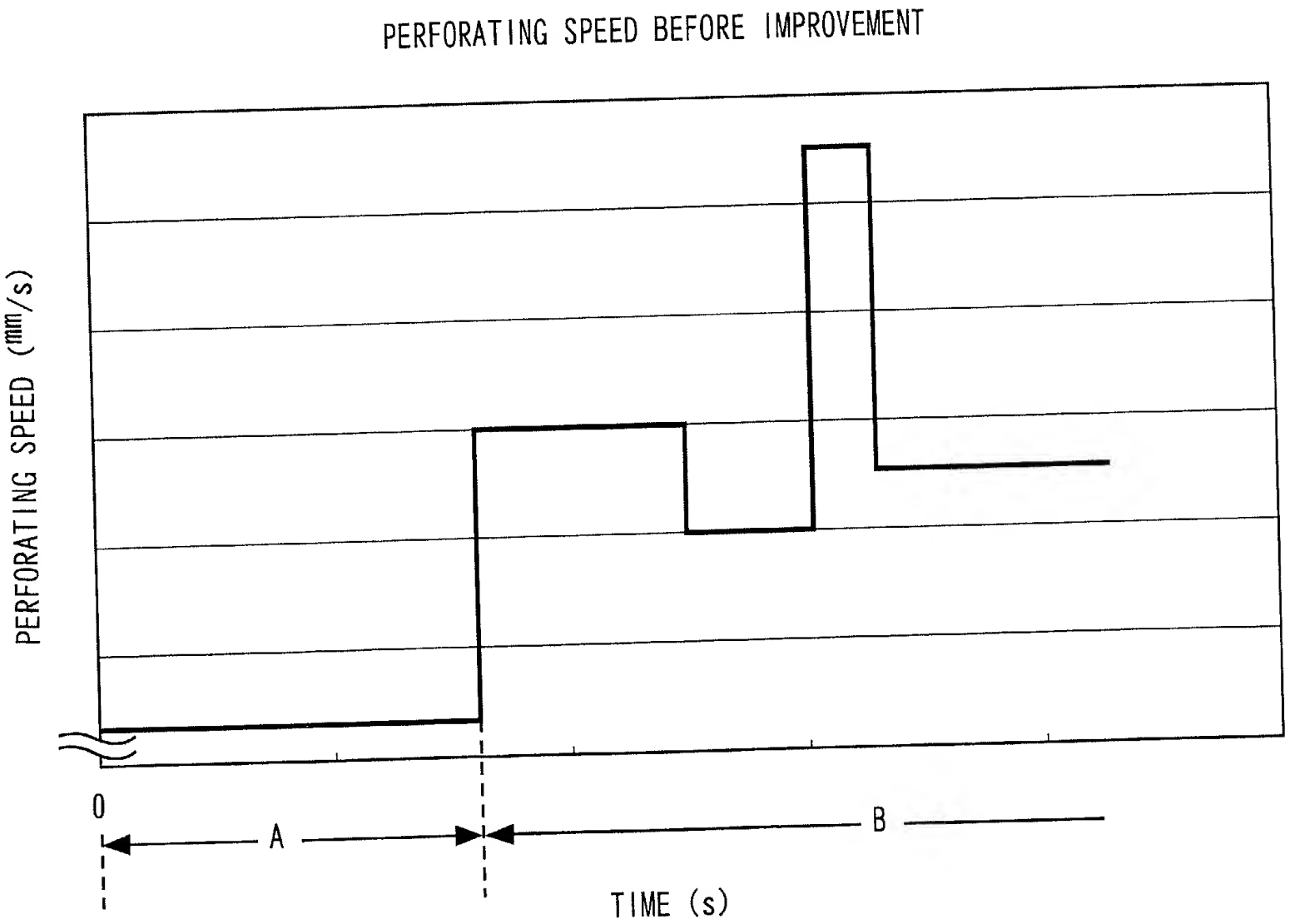

PERFORATING SPEED BEFORE IMPROVEMENT
PERFORATING SPEED (mm/s)
0
A
B
TIME (s)

FIG.9

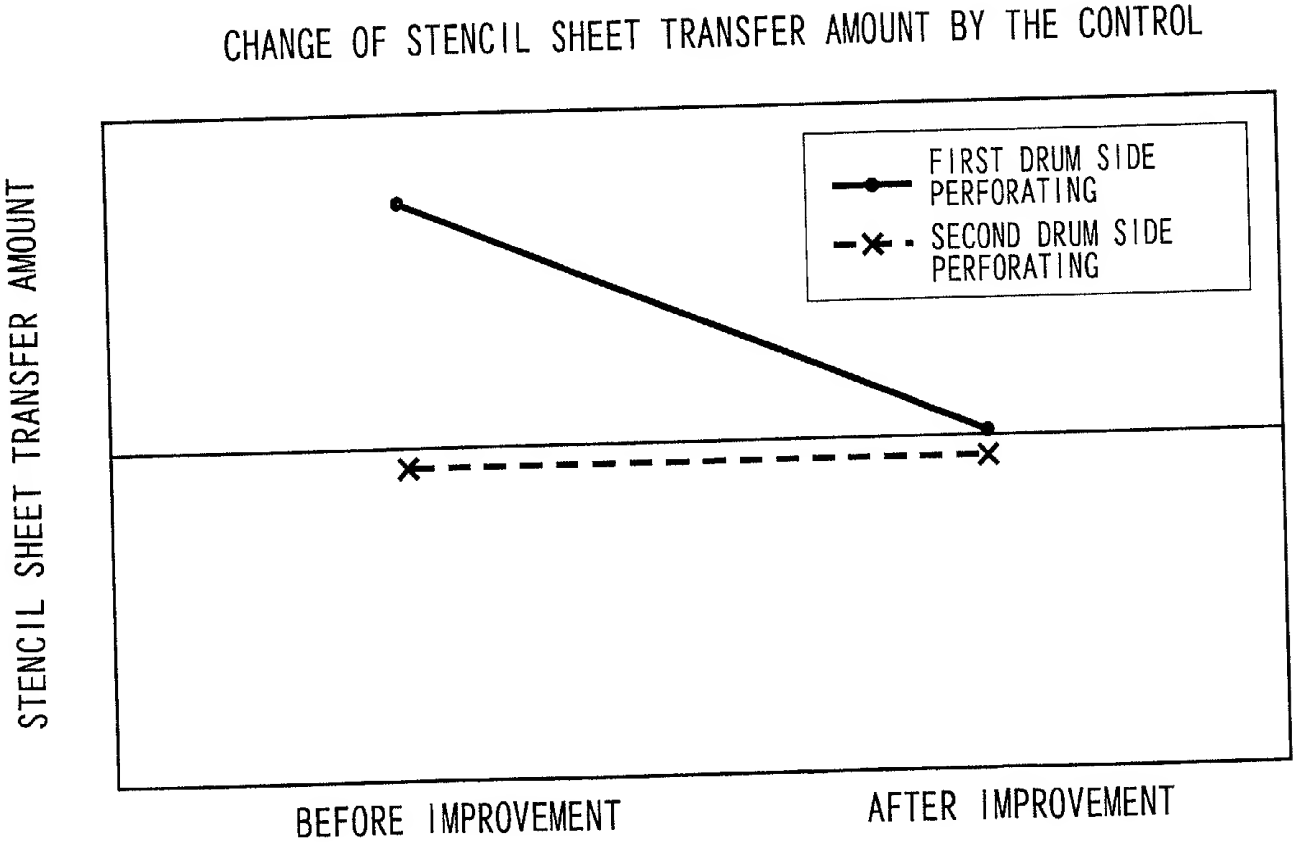
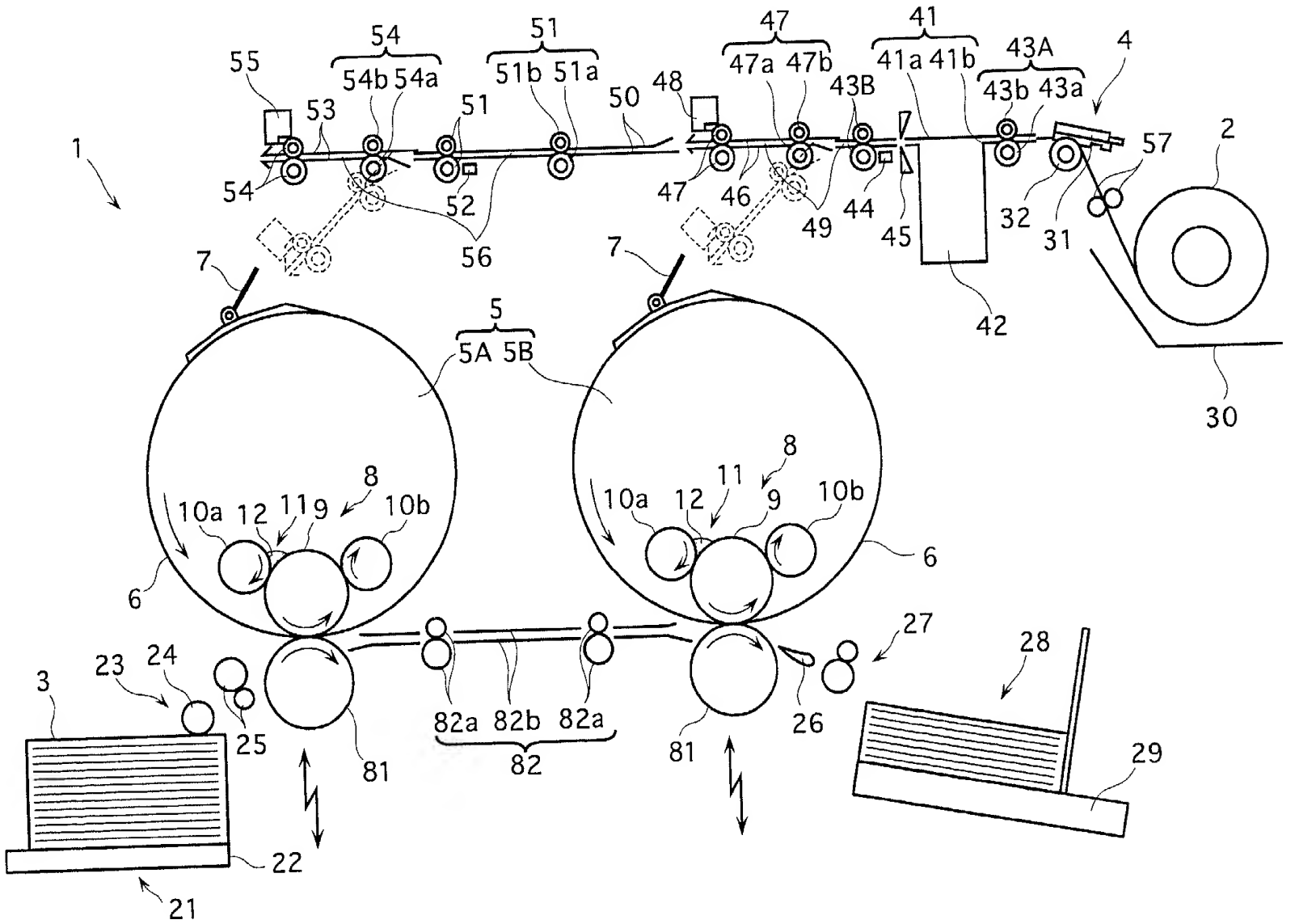

CHANGE OF STENCIL SHEET TRANSFER AMOUNT BY THE CONTROL
STENCIL SHEET TRANSFER AMOUNT
FIRST DRUM SIDE PERFORATING
SECOND DRUM SIDE PERFORATING
BEFORE IMPROVEMENT
AFTER IMPROVEMENT

FIG.10


1
54
54b 54a
51
51b 51a
47
47a 47b
41
41a 41b
43A
43b 43a
4
55
53
50
48
43B
57
2
54
52
56
47
46
49
44
45
32
31
7
7
5
5A 5B
42
30
8
8
10a 12 11 9 10b
10a 12 11 9 10b
6
6
27
28
3
23 24
25
81
82a 82b 82a
82
81
26
29
22
21